

## § 76.05-5

## 46 CFR Ch. I (10-1-07 Edition)

<sup>9</sup>Where fuel having a flashpoint of 110 °F. or lower is used, the space containing the fuel tanks shall be protected by a carbon dioxide system.

(3) Any vessel of 150 feet or less in length, not on an international voyage, having sleeping accommodations for 50 or more passengers. Vessels in this category are not required to have a detecting system in the cargo spaces.

(b) The arrangements and details of the fire detecting systems shall be as set forth in subparts 76.25 through 76.33.

[CGFR 65-50, 30 FR 16940, Dec. 30, 1965, as amended by CGFR 65-33, 31 FR 15282, Dec. 6, 1966]

### § 76.05-5 Manual alarm system.

(a) An approved manual alarm system shall be installed in all areas, other than the main machinery spaces, which are normally accessible to the passengers or crew on any vessel having sleeping accommodations for passengers or on any vessel on an international voyage.

(b) The arrangement and details of the manual alarm system shall be as set forth in subpart 76.35.

### § 76.05-10 Supervised patrol system.

(a) A supervised patrol or watchman system shall be provided on all vessels as set forth in §§ 78.30-10 and 78.30-15 of this subchapter.

(b) [Reserved]

### § 76.05-15 Fire main system.

(a) Fire pumps, hydrants, hose, and nozzles shall be installed on the following vessels:

(1) On all self-propelled vessels.

(2) After July 1, 1957, on all barges with sleeping accommodations for more than six persons.

(b) The arrangement and details of the fire main system shall be as set forth in subpart 76.10.

### § 76.05-20 Fixed fire extinguishing systems.

Approved fire extinguishing systems must be installed, as required by table 76.05-1(a) on all self-propelled vessels and on all barges with sleeping accommodations for more than six persons. Previously approved installations may be retained as long as they are main-

tained in good condition to the satisfaction of the Officer in Charge, Marine Inspection.

[CGD 95-027, 61 FR 35138, July 5, 1996]

### § 76.05-25 Hand portable fire extinguishers and semiportable fire extinguishing systems.

(a) Approved hand portable fire extinguishers and semiportable fire extinguishing systems shall be installed on all vessels as set forth in subpart 76.50.

(b) [Reserved]

## Subpart 76.10—Fire Main System, Details

### § 76.10-1 Application.

(a) The provisions of this subpart, with the exception of § 76.10-90, shall apply to all fire main installations contracted for on or after May 26, 1965. Installations contracted for prior to May 26, 1965, shall meet the requirements of § 76.10-90.

(b) [Reserved]

### § 76.10-3 Water availability.

(a) On all vessels on an international voyage, regardless of the date of construction, water pressure from the firemain protecting enclosed spaces shall be immediately available by maintenance of water pressure on the firemain at all times when passengers are aboard the vessel, or by remote control of fire pumps which control shall be easily operable and readily accessible.

(b) Where approved remote controls are not installed, an alarm shall be fitted which will sound in the engine room indicating a drop of water pressure on the system.

[CGFR 67-87, 32 FR 19181, Dec. 20, 1967]

### § 76.10-5 Fire pumps.

(a) Vessels shall be equipped with independently driven fire pumps in accordance with table 76.10-5(a).

TABLE 76.10-5(a)

| Gross tons  |          | Minimum number of pumps |       | Hose and hydrant size, inches | Nozzle orifice size, inches | Length of hose, feet |
|-------------|----------|-------------------------|-------|-------------------------------|-----------------------------|----------------------|
| Over        | Not over | International voyage    | Other |                               |                             |                      |
| .....       | 100      | 2                       | 1     | 1½                            | ½                           | 50                   |
| 100 .....   | 500      | 2                       | 1     | 1½                            | ⅝                           | 50                   |
| 500 .....   | 1,500    | 2                       | 2     | 1½                            | ⅝                           | 50                   |
| 1,500 ..... | 4,000    | 2                       | 2     | 1½                            | ⅞                           | 150                  |
| 4,000 ..... | .....    | 3                       | 3     | 1½                            | 1⅞                          | 150                  |

<sup>1</sup> 75 feet of 1½-inch hose and ⅝-inch nozzles may be used where specified by § 76.10-10(b).

(b) Vessels on an international voyage shall have a minimum total fire pump capacity at least equal to two-thirds of the required total bilge pump capacity, but in no case less than that required by this section. Each of the required fire pumps shall have a capacity not less than 80 percent of the total required capacity divided by the number of required pumps.

(c) Each pump shall be capable of delivering water simultaneously from the two highest outlets at a Pitot tube pressure of approximately 50 p. s. i. Where one or both of these outlets is a 1½-inch siamese fitting, both branches of the siamese fitting at each such outlet shall be utilized for the purpose of this requirements.

(d) Fire pumps shall be fitted on the discharge side with relief valves set to relieve at 25 p. s. i. in excess of the pressure necessary to maintain the requirements of paragraph (c) of this section or 125 p. s. i., whichever is greater. Relief valves may be omitted if the pumps, operating under shutoff conditions, are not capable of developing a pressure exceeding this amount.

(e) Fire pumps shall be fitted with a pressure gauge on the discharge side of the pumps.

(f) Fire pumps may be used for other purposes provided at least one of the required pumps is kept available for use on the fire system at all times. In no case shall a pump having connection to an oil line be used as a fire pump. Branch lines connected to the fire main for purposes other than fire and deck wash shall be arranged so that the requirements of paragraphs (b) and (c) of this section and any other services in-

stalled on the fire main can be met simultaneously.

(g) The total area of the pipes leading from a pump shall not be less than the discharge area of the pump.

(h) On vessels with oil fired boilers, either main or auxiliary, or with internal combustion propulsion machinery, where 2 fire pumps are required, they shall be located in separate spaces and the arrangement of pumps, sea connections, and sources of power shall be such as to insure that a fire in any one space will not put all of the fire pumps out of operation. However, in vessels of less than 300 feet in length, where it is shown to the satisfaction of the Commandant that it is unreasonable or impracticable to meet this requirement due to the size or arrangement of the vessel, or for other reasons, the installation of a total flooding carbon dioxide system may be accepted as an alternate method of extinguishing any fire which would affect the powering and operation of at least one of the required fire pumps.

[CGFR 65-50, 30 FR 16940, Dec. 30, 1965, as amended by CGD 95-028, 62 FR 51204, Sept. 30, 1997]

#### § 76.10-10 Fire station hydrants, hose and nozzles-T/ALL.

(a) The size of fire hydrants, hose, and nozzles and the length of hose required shall be as noted in table 76.10-5(a).

(b) In lieu of the 2½-inch hose and hydrants specified in table 76.10-5(a), on vessels over 1,500 gross tons, the hydrants in interior locations may have siamese connections for 1½-inch hose. In these cases the hose shall be 75 feet in length, and only one hose will be required at each fire station; however, if all such stations can be satisfactorily served with 50-foot lengths, 50-foot hose may be used.

(c) On vessels of 500 gross tons and over there must be at least one shore connection to the fire main available to each side of the vessel in an accessible location. Suitable cut-out valves and check valves must be provided. Suitable adaptors also must be provided for furnishing the vessel's shore connections with couplings mating those on the shore fire lines. Vessels of